Interim Forest Management Plan

Property Identifiers

Property Name: Governor Nelson

Property Designation or Type: State Park

DNR Property Code: 9182

Forestry Property Code: 1314

Property Location - County: Dane

Property Acreage: 422

Master Plan Date: None; Environmental Impact Statement 1975; Oak Woodland Management Plan 2011

Property Manager: Rene Lee

Property Assessment

The following should be considered during the property assessment:

A. Ecological Landscape description and property context:
Governor Nelson State Park is located in the Southeast Glacial Plains Ecological Landscape. This ecological landscape makes up the bulk of the non-coastal land area in southeast Wisconsin. This ecological landscape is situated on glacial till plains and outwash landforms, as well as rolling, ground, and interlobate moraines. Most of this ecological landscape is composed of glacial materials deposited during the Wisconsin Ice Age, but the southwest portion consists of older, pre-Wisconsin till with a more dissected topography. Soils are lime-rich tills overlain in most areas by a silt-loam loess cap. Agricultural and residential interests throughout the landscape have significantly altered the historical vegetation and the hydrology. Most of the rare natural communities that remain are associated with large moraines or in areas where the Niagara Escarpment occurs close to the surface.

Agricultural and urban land use practices have drastically changed the land cover of the Southeast Glacial Plains since Euro-American settlement. The current vegetation is primarily agricultural cropland. Remaining forests occupy only about 10% of the land area and important cover types include oak, maple-basswood, and lowland hardwoods. No large areas of contiguous forest exist today except on the Kettle Interlobate Moraine, which has relatively rugged topography that is often ill-suited for agricultural uses.

The Southeast Glacial Plains has the highest aquatic productivity for plants, insects, invertebrates, and fish of any ecological landscape in the state. The ecological landscape contains several large lakes such as those in the Madison area and in the Lake Winnebago Pool system. Kettle lakes are common on end moraines and in outwash channels. There are a number of significant river systems.

Governor Nelson State Park is located within two Landtype Associations (LTA):

- Waunakee Moraines (222Ke07). The characteristic landform pattern of this LTA is rolling till plain and irregular drumlins with scattered bedrock knolls, lake plains, and outwash plains. Soils are predominantly well drained silt and loam over calcareous sandy loam till or bedrock. Most of the LTA is in agriculture (76%); grasslands are the next largest at 9%.
- Dane-Jefferson Drumlins and Lakes (222Ke08). This LTA is an undulating complex of till plains with drumlins, outwash plains, lake plains and muck deposits common. Soils are predominantly well drained silt and loam over calcareous sandy loam till, loamy lacustrine or gravelly sandy outwash. Agriculture is the predominant land use (50%) followed by open and forested wetlands (13%), grasslands (10%), water (9%), and upland forests (8%).

B. **General property description – management, adjacent land uses, topography, soils, etc.:**
Governor Nelson State Park was established in 1975 and facilities (boat landing, parking lots, etc.) were developed later. Part of the park was row cropped until the mid-1980s; many of those acres were planted in native prairie species. Ditches and excavated shallow ponds are evident in the wetlands within the park. The park lies on the north shore of Lake Mendota. The northern end of the park is bisected by Dorn and Sixmile creeks.

Prescribed fire is the primary tool used to manage the planted prairies as well as other areas in the park. Invasive species control, using mechanical and chemical methods, is done in the park. An oak savanna/woodland restoration project was undertaken in 2004 and continues to the present. Restoration includes invasive species management, clearing brush, selectively sowing locally collected native seed and applying prescribed fire.

Soils are mainly silt loams with some sandy loam and loam. Mucks and silty clay loams are found in the wetlands. Topography varies from level to slopes of 20%. The highest, steepest terrain is in the southern part of the park.

The landscape surrounding the park is dominated by agriculture, the Yahara chain of lakes and urbanization, including Madison which is Wisconsin's second largest city. The park is adjacent to Dorn Creek Fishery Area to the west and DNR-owned statewide habitat areas to the north along Sixmile Creek.

C. Current forest types, size classes and successional stages:
Note that not all of the park acreage has been entered into the forest reconnaissance database (406 out of 422 acres).

- **Oak:** 53 acres (13% of total acreage), in 3 stands. All typed as large sawlogs (15+ inches dbh). Dates of origin 1865-1900. Dominant trees are oak (bur, white, and black) and black cherry.
- **Central hardwood:** 23 acres (6% of total acreage), in 2 stands. All types as large sawlogs (15+ inches dbh). Dates of origin 1950 and 1965. Dominant trees are bitternut hickory, black cherry, box elder, hackberry, and Norway maple.
- **Bottomland hardwood:** 12 acres (3% of total acreage) in 1 stand. Typed as large sawlogs (15+ inches dbh). Date of origin 1965. Dominant trees are silver maple and cottonwood.
- **Miscellaneous deciduous:** 8 acres (2% of total acreage in 1 stand). Typed as hardwood poles (5-11 inches dbh). Date of origin 1980. Dominant tree is box elder.
- **Other types:** 310 acres (76% of total acreage). Includes grasslands, upland brush, developed areas, various types of wetlands and Dorn and Sixmile creeks.

D. NHI: Endangered, Threatened, Special Concern species, Species of Greatest Conservation Need (SGCN):
Four rare terrestrial animals (1 threatened, 3 special concern) have been found at or within one mile of Governor Nelson State Park. All of the animals are SGCN. One of the animal occurrences is based on a historical record. Another animal has recently been listed as federally endangered. Three additional fish species (1 threatened, 2 special concern) have been found in Lake Mendota or the Yahara River in the vicinity of the park. Three rare plant species (1 threatened, 2 special concern) have been found at or within one mile of the park. Two of the plant occurrences are historical records.

E. **Wildlife Action Plan Conservation Opportunity Areas (COA) Important Bird Areas (IBA):**
The park is not within a COA or IBA

F. **Significant cultural or archeological features:**
Archaeological and historical sites have been identified at the park including effigy mounds.

G. Invasive species:
Numerous including non-native bush honeysuckles, common and glossy buckthorn, leafy spurge, garlic mustard, dame's-rocket, black locust, and Norway maple

H. Existing State Natural Areas (SNA) designations/natural community types limited in the landscape:
No SNAs. Oak savanna/woodland restoration underway

I. Primary public uses (recreation):
Governor Nelson is a day use. The park offers picnic areas & playgrounds, boat launch, hiking/non-motorized winter trails, swimming beach and a pet beach.

J. Biotic Inventory Status:
Can be accessed at Rapid ecological assessment 2013

K. Deferral/consultation area designations:
None

IFMP components

Management Objectives: (Outline primary forest management objectives):

1. Restore and maintain oak savanna and woodland according to the park's 2011 oak woodland management plan.
2. Preserve the integrity of known archaeological and historical features by following DNR Manual Code1810.1 (Historic Preservation), the department's Burials, Earthworks, and Mounds Preservation Policy & Plan, state statutes and federal laws.
3. All hardwood stands:
   a. Enhance, maintain, and protect recreational opportunities.
   b. Provide for Park visitor safety in developed areas.
4. Conduct invasive species management as needed

Property Prescriptions (Identify specific and pertinent prescriptions by area or forest type, including passive management areas, extended rotation, and other information that will help achieve the objectives)

1. Commercial timber sales and non-commercial practices may be used to achieve management objectives.
2. Oak savanna/woodland restoration (stands 1, 2, 4 and 13): targeted tree removal to attain canopy closure of 50-95%. Tree removal can be done with commercial timber sales (sawlog, pulpwood, firewood, and biomass) or non-commercial methods such as girdling or felling trees without removal.
3. Bottomland hardwoods (stand 15) and oak (stand 11) will be managed passively. Invasive species management is allowed.
4. Convert stands 14 (central hardwoods) and 17 (upland brush) to oak dominated. Commercial sales and non-commercial methods can be used.
5. Where feasible, use commercial timber sales to address hazard tree removal
6. Invasive species: identify invasive plant species and implement control practices such as hand pulling and biological, chemical, and mechanical control to eliminate or reduce negative impacts.

Summary of Public Involvement and Comments Received

Maps (Optional)

a. Forest Cover Type

PREPARED BY:

Property Manager Date

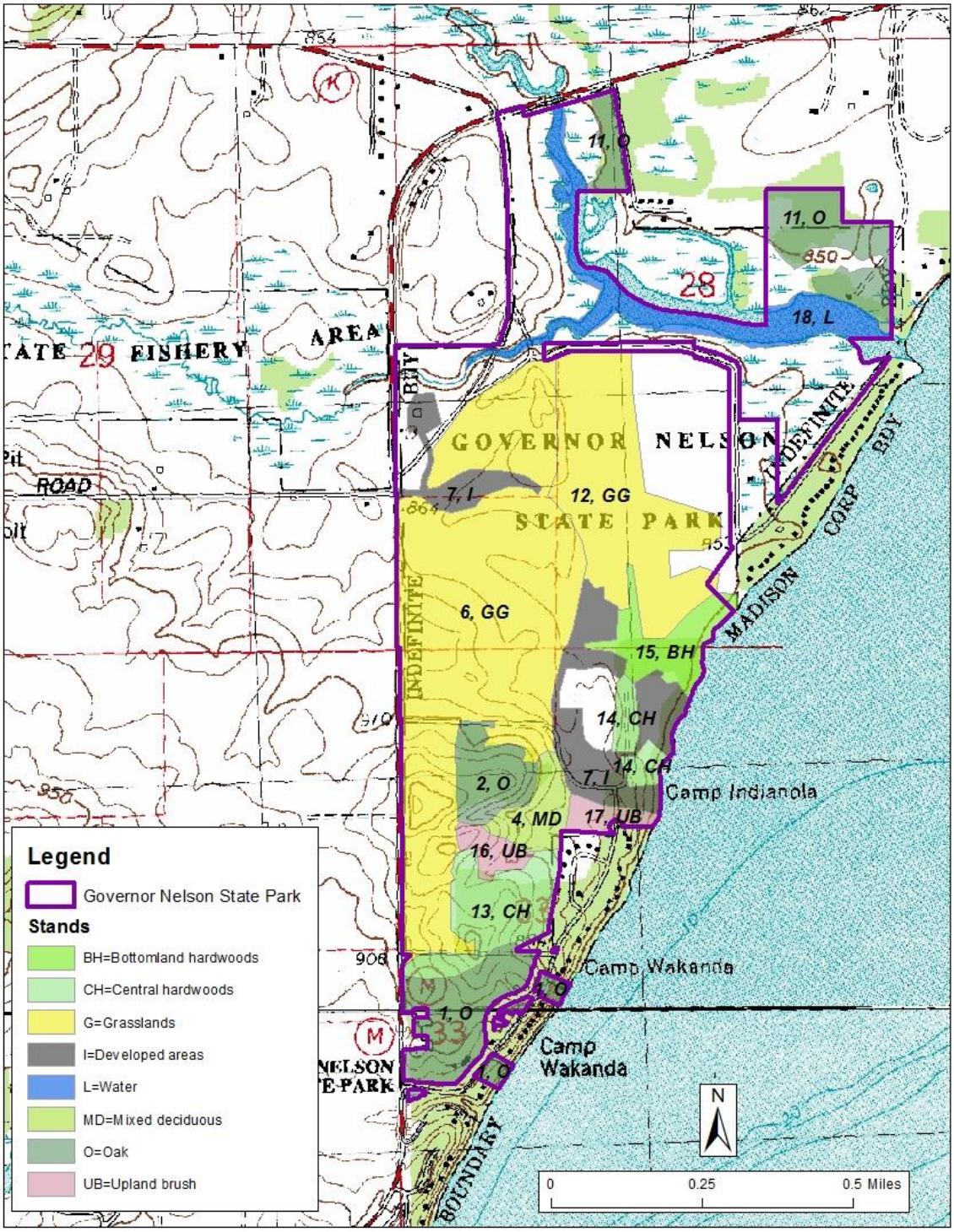
APPROVED:

Area Program Supervisor Date

REVIEWED BY:

Forester Date

District Ecologist Date



a. Forest reconnaissance cover types at Governor Nelson State Park. The numbers on the map indicate stand numbers.